

FEB 09 1982

DPM 5376

Strip w/ Salt

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME KOLENE CORPORATION		EMERGENCY TELEPHONE NO. (313) 273-9220
ADDRESS (Number, Street, City, State, and ZIP Code) 12890 Westwood Avenue, Detroit, Michigan 48223		
CHEMICAL NAME AND SYNONYMS Cleaning Chemicals		TRADE NAME AND SYNONYMS Kolene #5
CHEMICAL FAMILY Caustic Alkali	FORMULA NaOH, NaNO₃, NaCl	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLOW		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES

	%	TLV (Units)
Sodium Hydroxide	40 - 60% Wt.	
Sodium Nitrate	40 - 60% Wt.	
Sodium Chloride	10% Max.	

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	Over	1200	SPECIFIC GRAVITY (H ₂ O=1)	2.0
VAPOR PRESSURE (mm Hg.)		0	PERCENT VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR=1)		N.A.	EVAPORATION RATE (_____ =1)	N.A.
SOLUBILITY IN WATER		Complete		
APPEARANCE AND ODOR White granular odorless solid				

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None	FLAMMABLE LIMITS	Lel	Uel
		N.A.	N.A.	N.A.
EXTINGUISHING MEDIA Carbon dioxide and dry powders in vicinity of molten salts.				
SPECIAL FIRE FIGHTING PROCEDURES				
Avoid vaporizing liquids, water, and acid compounds in salt baths.				
UNUSUAL FIRE AND EXPLOSION HAZARDS Introduction of water, vaporizing liquids, magnesium or reducing agents into molten bath may cause serious explosions.				

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	2 mg/m ³ of air.
EFFECTS OF OVEREXPOSURE	Effects of contact range from irritation to severe destruction of tissues.
EMERGENCY AND FIRST AID PROCEDURES	Flood affected surfaces with warm water for at least 15 minutes and contact a physician.

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Overheating above 1000°F.
INCOMPATIBILITY (Materials to avoid)			
water, acids, reducing agents.			
HAZARDOUS DECOMPOSITION PRODUCTS			
None likely below 1000°F. Nitrogen oxides possible above this temperature.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	N.A.

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Sweep or shovel solid material into metal containers. Avoid personal contact. Rinse or hose area well.
WASTE DISPOSAL METHOD	Dissolve in cold water and neutralize with acid.

SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type)			
Dust mask when handling solid salt.			
VENTILATION	LOCAL EXHAUST	SPECIAL	
	MECHANICAL (General)		
	Forced exhaust over salt bath Required.	OTHER	
PROTECTIVE GLOVES		EYE PROTECTION	
Rubber for solid salt		Face shield	
OTHER PROTECTIVE EQUIPMENT			
Heat-proof gloves and appropriate apparel for molten salt.			

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Store in a dry area. Avoid contact of salt with acids. Keep drums closed when not in use.
OTHER PRECAUTIONS	Avoid bodily contact.

PAGE (2) The information presented here is based on tests believed to be reliable. It is intended to be helpful, but we cannot assure that similar results would be produced under varying conditions.



U.S. DEPARTMENT OF LABOR
WORKPLACE STANDARDS ADMINISTRATION
BUREAU OF LABOR STANDARDS
MATERIAL SAFETY DATA SHEET

FORM NO. OSHA-20 (MODIFIED)
MAY 1971

DPM 5376
MDC CONTROL NO.

SECTION I: MATERIAL AND MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME	KOLENE CORPORATION	EMERGENCY TELEPHONE NO.	313 (273-9220)
ADDRESS (NUMBER, STREET, CITY, STATE AND ZIP CODE)		local Dave Lowe	
12890 Westwood Avenue Detroit Michigan 48223		213-430 0498	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS		
	KOLENE #5		
CHEMICAL FAMILY	Caustic	FORMULA	

SECTION II: HAZARDOUS INGREDIENTS*

PAINTS, PRESERVATIVES/SOLVENTS	%	TLV (UNITS)	ALLOYS AND METALLIC COATINGS	%	TLV (UNITS)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES*				%	TLV (UNITS)
Sodium hydroxide				48	
Sodium Nitrate				47	
Sodium chloride				5	

SECTION III: PHYSICAL DATA

BOILING POINT (°F)		SPECIFIC GRAVITY (H ₂ O = 1)	
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR = 1)		EVAPORATION RATE (_____ = 1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR			

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

*PLEASE DO NOT USE GENERALIZATIONS, SUCH AS PETROLEUM HYDROCARBONS, ALCOHOL, KETONES.
USE SPECIFIC CHEMICAL NAMES, SUCH AS METHANOL, BENZENE, PERCHLOROETHYLENE.

SECTION V: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE

EMERGENCY AND FIRST AID PROCEDURES

SECTION VI: REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE		

INCOMPATIBILITY (MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

WASTE DISPOSAL METHOD

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (GENERAL)	OTHER

PROTECTIVE GLOVES

EYE PROTECTION

OTHER PROTECTIVE EQUIPMENT

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

OTHER PRECAUTIONS

PREPARED BY

DATE

DPM 5376

KOLENE #5

SALT BATH OPERATING—SAFETY

KOLENE SALT IN THE "AS SUPPLIED" STATE IS HYGROSCOPIC AND OPENED DRUMS SHOULD BE EMPTIED INTO THE BATH WITH MINIMUM DELAY OR TIGHTLY RE-COVERED.

GREAT CARE SHOULD BE EXERCISED IN HANDLING OF WATER AROUND A MOLTEN SALT BATH. THE INTRODUCTION OF WATER BY SPLASHAGE, THE INSERTION OF WET PARTS OR WET SLUDGE PANS, OR ADDITION OF WET SALT FOR MAKE-UP CAN BE EXPLOSIVE IN NATURE DUE TO THE SUDDEN GENERATION OF STEAM, CAUSING DANGER AND DAMAGE FROM THE VIOLENT BLOWING AND RICOCHETING OF MOLTEN SALT.

NEVER IMMERSE TUBING OF ANY TYPE IN MOLTEN SALT UNLESS VENTED AND THOROUGHLY DRY INSIDE. NEVER PROBE MOLTEN SALT WITH TUBING OR PIPE OF ANY KIND.

THE OPERATOR SHOULD WEAR LONG SLEEVES, GLOVES AND A FACE SHIELD WHEN PERFORMING MAINTENANCE WORK AT THE SALT BATH OR OPERATING THE SALT BATH.

IF EITHER HOT OR COLD SALT CONTACTS THE SKIN, IMMEDIATELY RINSE THOROUGHLY WITH WATER. A THOROUGH RINSING WITH MILD BORIC ACID SOLUTION OR VINEGAR WILL NEUTRALIZE THE SALT.

FOR SALT BURNS IN OR AROUND THE EYES, RINSE THOROUGHLY FOR AT LEAST FIFTEEN MINUTES WITH WATER AND IMMEDIATELY OBTAIN MEDICAL ATTENTION.

PROPER MEDICAL AID SHOULD BE GIVEN TO ALL TYPES OF SALT BURNS.

SALT BURNS SHOULD BE TREATED AS CAUSTIC SODA BURNS.

ADEQUATE EYE PROTECTION SHOULD BE WORN WHEN WORKING AROUND MOLTEN SALT.